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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/151,670	09/11/1998	STEVEN B. KAUFMAN	KAUFMAN-9-7	8185

7590 07/16/2002

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EXAMINER

HAROLD, JEFFEREY F

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 07/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

HG

Office Action Summary

Application No.

09/151,670

Applicant(s)

KAUFMAN ET AL.

Examiner

Jefferey F. Harold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1, 4-5, 12-13, 16 and 20** are rejected under 35 U.S.C. 102(b) as being anticipated by Young (U.S. Patent 4,682,957).

Regarding **claims 1 and 12-13**, Young discloses a teleconference and teaching method an apparatus, in addition, Young discloses switching circuitry (27) for accepting input signals from a microphone and directing those to a telephone line for transmission to the remote location via the line. The input signal may come from a standard microphone (28), and is transmitted to a loudspeaker (35). Further, switch (SW4) allow the speakerphone telephone line connection (39) to be connected directly to telephone line (10) or to the telephone handset connection, as disclosed at column 5, lines 28-37, column 6, lines 49-54 and exhibited in figure 2.

Regarding **claims 4 and 5**, Young discloses everything claimed as applied above (see claim 1), in addition, Young discloses wherein the speaker phone circuitry supports both duplex and simplex modes, as discloses at column 4 lines 66 through column 5, line 46.

Regarding **claim 16**, it is interpreted and thus rejected for the same reasons set forth above in **claim 1**. Since **claim 16** discloses a method that corresponds to the

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apparatus of **claim 1**, the method is inherent in that it simply provides functionality for the structural implementation found in **claim 1**.

Regarding **claim 20**, it is interpreted and thus rejected for the same reasons set forth above in **claim 1**. Since **claim 20** discloses a means that corresponds to the apparatus of **claim 1**, the means is inherent in that it simply provides functionality for the structural implementation found in **claim 1**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. ***Claims 2-3, 14, 17-19 and 21-23*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Young in view of Norris (U.S. Patent 4,930,156).

Regarding **claims 2 and 3**, Young disclose everything claimed as applied above (see claim 1), however, Young fails to disclose a power supply adapted to include a battery. However, the examiner maintains that it was well known in the art to provide a power supply adapted to include a battery, as taught by Norris.

In a similar field of endeavor Norris discloses a telephone receiver transmitter. In addition, Norris discloses a battery power supply (65), as disclosed at column 6, line 16 and exhibited in figure 4.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a power supply adapted to include a battery, as taught by Norris, for the purpose of providing a convenient power source to operate the speakerphone.

Regarding **claim 14**, Young discloses everything claimed as applied above (see claim 1), however, Young fails to disclose a switch having a first position for connecting the handset jack to the telephone and the second position for connecting the audio module to the handset jack. However, the examiner maintains that it was well known in

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the art to provide a switch having a first position for connecting the handset jack to the telephone and the second position for connecting the audio module to the handset jack, as taught by Norris.

In addition, Norris discloses a mode switching device (33), which reads on claimed "switch", wherein one position the signal is transferred directly to the hand set (34) and in the secondary position the signal is transferred directly via the interconnect jack (32), which reads on claimed "audio module", to the ear mounted speaker/microphone combination (49), as disclosed at column 4, lines 27-60 and exhibited in figure 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a switch having a first position for connecting the handset jack to the telephone and the second position for connecting the audio module to the handset jack, as taught by Norris, for the purpose of allowing any conventional telephone to be used to make the initial telephone connection to the remote location, and then the speakerphone circuitry to be connected to the phone line for operation.

Regarding **claims 17-19**, they are interpreted and thus rejected for the same reasons set forth above in **claims 1-3**. Since **claims 17-19** disclose a method that corresponds to the apparatus of **claims 1-3**, the method is inherent in that it simply provides functionality for the structural implementation found in **claims 1-3**.

Regarding **claims 21-23**, they are interpreted and thus rejected for the same reasons set forth above in **claims 1-3**. Since **claims 21-23** disclose a means that

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corresponds to the apparatus of **claims 1-3**, the means is inherent in that it simply provides functionality for the structural implementation found in **claims 1-3**.

3. **Claims 6-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Young as applied to claim 5 above, and further in view of Eppler, Jr. et al. (U.S. Patent 5,600,714), hereinafter referenced as Eppler.

Regarding **claims 6 and 10**, the Young discloses everything claimed as applied above (see claim 5), however, the Young fails to disclose an audio echo canceler. However, the examiner maintains that it was well known in the art to provide an audio echo canceler, as taught by Eppler.

In a similar field of endeavor Eppler discloses a conference telephone using dynamic modeled line hybrid. In addition, Eppler discloses room acoustic echo canceler (24), which reads on claimed "audio echo canceler", as disclosed at column 5, lines 8-9 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing an audio echo canceler, as taught by Eppler, for the purpose of canceling actual echoes in the room with the speaker phone.

Regarding **claim 7**, Young and Eppler disclose everything claimed as applied above (see claim 6), however, the combination fails to disclose wherein the audio echo canceler is an algorithm included in a digital signal processor. However, the examiner

maintains that it was well known in the art to provide wherein the audio echo canceler is an algorithm included in a digital signal processor, as taught by Eppler.

In addition, Eppler discloses wherein the room acoustic echo canceler (24) during use adapts to both initial conditions and to changes in condition in the room, which reads on claimed "algorithm" as disclosed at column 7, lines 38-52 and exhibited in figure 1, further the room acoustic echo canceler (24) in combination with the line echo canceler (46) are integrated on a DSP chip (70), which reads on claimed "digital signal processor," as disclosed at column 6, line 37 through column 7, line 24 and exhibited in figure 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination by specifically providing wherein the audio echo canceler is an algorithm included in a digital signal processor, as taught by Eppler, for the purpose of integrating component to reduce the size.

Regarding **claims 8 and 11**, the combination (Young in view of Eppler) discloses everything claimed as applied above (see claim 7), however, the combination fails to disclose a hybrid echo canceler. However, the examiner maintains that it was well known in the art to provide hybrid echo canceler, as taught by Eppler.

In addition, Eppler discloses a hybrid echo canceler (46), as disclosed at column 6, line 37 and exhibited in figure 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination by specifically providing a hybrid

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echo canceler, as taught by Eppler, for the purpose of canceling echo associated with the two-four wire line connection.

Regarding **claim 9**, Young discloses everything claimed as applied above (see claim 1), however, Young fails to disclose a first codec, and echo canceler, and a second codec. However, the examiner maintains that it was well known in the art to provide a first codec, and echo canceler, and a second codec, as taught by Eppler.

Regarding the "first codec", Eppler discloses analog-to-digital converter (16) and digital-to-analog converter (32), which reads on claimed "first codec", as disclosed at column 4, line 58 through column 5, line 38 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a first codec as taught by Eppler, for the purpose of communicating in different formats.

Regarding the echo canceler, Eppler discloses a room acoustic echo canceler (24), which reads on claimed "echo canceler", as disclosed at column 5, lines 8-9 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing an echo canceler as taught by Eppler, for the purpose of reducing the amount of noise in the circuit.

Regarding the "second codec", Eppler discloses analog-to-digital converter (42) and digital-to-analog converter (54), which reads on claimed "second codec", as disclosed at column 5, lines 42-65 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a second codec as taught by Eppler, for the purpose of communicating in different formats.

5. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Young in view of McDuffee (United States Patent 6,002,945).

Regarding **claim 15**, Young discloses everything claimed, as applied above, (see claim 1), however, Young fails to disclose voice pager. However, the examiner maintains that it was well known in the art to provide a voice pager, as taught by McDuffee.

In a similar field of endeavor McDuffee discloses a combination pager and telephone. In addition, McDuffee discloses wherein the telephone incorporates the features of a mobile pager, as disclosed at column 3, lines 56-62.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a voice pager, as taught by McDuffee, for the purpose of notifying the user of a pending message.

6. **Claims 24 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Young, in view of Norris, in view of Eppler, further in view of McDuffee.

Regarding **claims 24 and 25**, Young discloses a microphone (28), a loudspeaker (35) and a speaker phone that operates when attached to the telephone and when attached directly to the PSTN, however, Young fails to disclose a handset cord adapter, an audio echo canceler, and a voice pager. However, the examiner maintains that it

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was well known in the art to provide a headset adapter, an audio echo canceler, and a voice pager, as taught by Norris, Eppler and well know prior art.

Regarding the headset adapter, Norris discloses the encasement (17) comprising a jack (28) to receive a modular plug, which reads on claimed "external handset cord adapter", as disclosed at column 3, line 51 through column 4, line 4; and exhibited in figures 1 and 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a handset cord adapter, as taught by Norris, for the purpose of adapting telephones of differing wiring configuration for universal attachment of a speaker phone.

Regarding the echo canceler, Eppler discloses room acoustic echo canceler (24), which reads on claimed "audio echo canceler", as disclosed at column 5, lines 8-9 and exhibited in figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing an audio echo canceler, as taught by Eppler, for the purpose of canceling actual echoes in the room with the speaker phone.

Regarding the voice pager, McDuffee discloses wherein the telephone incorporates the features of a mobile pager, as disclosed at column 3, lines 56-62.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Young by specifically providing a voice pager, as taught by McDuffee, for the purpose of notifying the user of a pending message.

Response to Arguments

7. Regarding applicant's arguments with respect to examiner's official notice rejection of claims 15 and 24-25, the examiner has provided a reference to support the rejection.

Applicant's arguments filed May 6, 2002, have been fully considered but they are not persuasive.

Regarding applicant's argument concerning removable interfacing, the examiner respectfully disagrees since the above cited rejection more than adequately provides support for the claimed limitations. Further, the switching circuit of Young is removably interfaced with either telephone line (10) or telephones (26 or 18) via switch (SW4).

Regarding applicant's argument concerning adapting a common telephone for operation as a speakerphone and converting a common telephone into a speakerphone, the examiner respectfully disagrees since the above cited rejection more than adequately provides support for the claimed limitations. Further, telephones (18 and 26), which are common telephones, are adapted/converted for operation as a speakerphone via switching circuit (27) via switch (SW4).

Regarding applicant's argument concerning temporarily connecting, the examiner respectfully disagrees since the above cited rejection more than adequately provides support for the claimed limitations. Further, the telephone (18 or 26) is connected to the speakerphone circuitry via the telephone base, this connection is a temporary connection. The switch (SW4) can connect either the telephone base or the telephone line temporarily.

In response to applicant's argument that Norris is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Norris is provided to teach the limitation of a power supply adapted to include a battery. Young discloses all of the other limitations.

In response to applicant's argument that Eppler is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Eppler is provided to teach and echo canceller and a digital signal processor.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is (703) 306-5836. The examiner can normally be reached on Monday-Friday 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



JFH
July 10, 2002

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

